

ABSTRACT OF THE DISCLOSURE

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The invention provides, for an IEEE 1394 network wherein a plurality of IEEE 1394 serial buses are connected to each other by means of a bridge, a synchronization method between the buses wherein an existing 1394 apparatus operates even if it is connected to one of the buses and a band resource of the bus is not consumed. As a network cycle master which functions as a reference clock source of an entire network, an arbitrary one portal is selected. In each bus to which the network cycle master is not connected, a portal which has the least node hop number to the network cycle master is selected as a local cycle master. The other portals which are not selected are all set as a dependent portal. The network cycle master and the dependent portals transmit a synchronizing signal to the other portals in the same bridge. Each local cycle master receives the synchronizing signal transmitted from the network cycle master or the dependent portal in the same bridge and performs control of synchronizing the cycle frequency thereof with the cycle frequency of the portal which has transmitted the synchronizing signal. Each of the network cycle master and the local cycle masters operate as a cycle master in the bus to which it is connected.